



Resilience and housing markets: Who is it really for?

Graham Squires^{a,*}, Iain White^b

^a Massey University, Tennent Drive, Private Bag 11 222, Palmerston North, New Zealand

^b Waikato University, Waikato, Gate 1 Knighton Road, Private Bag 3105, Hamilton, 3240, New Zealand

ARTICLE INFO

Keywords:

Resilience
Economy
Housing markets
Property
New Zealand

ABSTRACT

Ten years after the Global Financial Crisis, this research examines how resilience theory and rhetoric relating to the economy and housing markets has been translated into policy and practice. The methodology involves a case study of a city (Auckland) with a nationally dominant housing market and high unaffordability. Via secondary literature and a series of interviews we analyse questions connected to resilience from what, how, by whom, and discuss the implications and limits of the approach. The research demonstrates that resilience policies have focused on providing institutional stability to shock, rather than adaptation or transformation to a state that is less exposed to the systemic risks associated with flows of global capital, debt, and speculative activity. This is related to how the whole concept is vaguely defined. In the absence of guidance, institutions reinterpret resilience in a way that underpins existing market and regulatory logics, such as by increasing capital reserves or lending ratios. As a consequence, the dominant political economy, selected institutions, and to an extent, existing homeowners and speculative investors are privileged in resilience policy. By bringing these selectivities and limits to light we argue for a shift in focus away from an institutional frame to one with a deeper understanding of both the balance of an economy and the wider forces that create and reproduce housing markets.

1. Introduction

The reach and impact of the Global Financial Crisis (GFC) served to highlight both the critical importance of housing markets for many national economies and how flows of global finance operate in an opaque manner beyond the knowledge and reach of much domestic regulation and legislation. In the aftermath of the crisis it became apparent that the devastating effect of weak regulation in a single country (the US subprime mortgage market) had rapidly spread, forcing the implementation of emergency fiscal measures around the world. Beyond the more noticeable impacts on housing, knock-on effects such as the restriction of credit and purchasing power led to a global slowdown with businesses in countries beyond the US losing jobs or filing for bankruptcy. The connectivity, complexity, and vulnerability of our economic system was highlighted in a most high profile, and shocking, fashion (Bristow and Healy, 2015).

Over a decade since the crisis, the economic importance of housing has grown and the sector continues to attract huge investment. Indeed, the consistent flow of global finance into national housing markets is now a key feature of many post-industrial capitalist economies (Aalbers, 2009, 2016). Consequently, discourse regarding the extent to which buoyant housing markets are a risk to national economies

appears to be a recurring theme (IMF, 2016). To provide added nuance, the wider importance of housing means that the risks are diverse, including for example, unaffordability and equity concerns (Dorling, 2014; Eaqub and Eaqub, 2015; Murphy, 2016; Piketty, 2015; REAU, 2018; Kuang and Li, 2012). Indeed, cities with high unaffordability are now ranked annually (Demographia, 2018). The most recent top 10 median multiple unaffordability ratios (median house price divided by median household income) are Hong Kong (19.4), Sydney (12.9), Vancouver (12.6), San Jose (10.3), Melbourne (9.9), Los Angeles (9.4), Honolulu (9.2), San Francisco (9.1), Auckland (8.8), and London (8.5). As the housing market in many of these cities also plays a dominant role domestically, we can see how this global economic risk cascades down to nation states (Austin et al., 2014). However, given that housing plays multiple roles, from offshore capital investment to the promise of homeownership, the risks are subjective: depending upon your perspective, there may be risk of a crash or risk of a continuation.

In part response to the difficulties in predicting and managing this multi-scalar risk, the need for regions and nations to be more 'resilient' to potential economic shock and stress has begun to permeate discourse (e.g. Bristow, 2010; Eraydin, 2016; Hudson, 2010). For example, a recent OECD report introduced a set of vulnerability indicators to help provide warning signs, arguing: 'the high costs of crises underscore the

* Corresponding author.

E-mail addresses: g.squires@massey.ac.nz (G. Squires), iain.white@waikato.ac.nz (I. White).

<https://doi.org/10.1016/j.landusepol.2018.10.018>

Received 4 May 2018; Received in revised form 1 October 2018; Accepted 5 October 2018

Available online 04 November 2018

0264-8377/ © 2018 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

need to strengthen the resilience of economies' (Röhn et al., 2015: 3). Encompassing compelling notions of coping, adaptation, and transformation, resilience has quickly become a key strand of the public policy lexicon (Chandler and Coaffee, 2016). However, in studies that have examined its application, there has been concerns raised about its conceptual 'slipperiness' and its ability to deliver substantive change in its translation from rhetoric to reality (Davoudi, 2012; White and O'Hare, 2014).

This paper aims to add to this discourse by examining the way resilience has been applied as a means to manage risk stemming from an overheated housing market. While states have some power to shape markets to be more 'resilient', critical questions remain regarding conceptualisation, implementation, and unevenness; or more simply, resilience from what, how, and for whom? The risks associated with housing markets are deeply contextual: we have both a need for stability and a need for change; fears for nations and fears for individuals. To analyse this highly contested and political arena we use a case study to investigate how economic resilience policies are applied in a country with both a dominant housing market (New Zealand) and a highly unaffordable city and region (Auckland). We focus on three questions. (1) How does resilience become translated into real-world practice and policy to manage the economic risk relating to housing markets? (2) What are the implications? (3) And how may it be improved?

This research has revealed the following key messages. The application of resilience is overwhelmingly focused on increasing economic stability to external shock, rather than changing the exposure of the economy to the risk. This is due, in part, to the way that resilience is implemented and by whom. While resilience in the economy is widely accepted as an objective, there is no central direction or expert consensus over what that should entail, or how you would know if it was achieved. In this vacuum resilience practice is largely shaped by long-standing institutional logics; for example, increasing cash reserves or tweaking lending ratios. The implications of this are that while the systemic risks stemming from the housing market are relatively unchanged, the risks were internally redistributed away from powerful actors, both within and beyond nations. For example, those who own homes or invested in the housing market were actually better protected from the effects of a housing market shock than those who do not. While on a wider scale, responsibility to cope passes not just from the state to individuals, as critiqued elsewhere (e.g. Kaika, 2017; Evans and Reid, 2013), but from large nations to smaller nations where economies are interconnected.

In raising this critique, we also provide insights for other nations and cities seeking to use the concept as a policy tool. There is little doubt that buoyant housing markets have fuelled national economic growth and, while stability is desirable, without strong central direction to influence power and agency, systemic risk in the economy is largely untouched. Put differently, actors and agencies who help shape the housing market have themselves proved resilient to wider forces for change. While the power of the state to address this global issue is limited, they do have the power to shape markets and adjust the balance of economies and, in doing so, help reduce overall exposure to this systemic risk. As such, measures beyond stability need to be pursued to make both an economy, and those most vulnerable, less exposed to this potential shock.

2. Methods

The research approach involved the use of both secondary and primary data. Firstly, a desk-based study enabled understanding of resilience theory, the problems of implementation, and its specific application to the resilience of an economy and its housing market(s). Second, a case study was used to identify and interrogate key issues in policy and practice. New Zealand was chosen with the Auckland housing market being both unaffordable and nationally dominant. For the purposes of the paper, we define a dominant housing market as one

where the value and number of properties in an urban area has a significant and disproportional effect on the national economy. To contextualise the situation, in 2017 Auckland had a population of 1,534,700 people, which accounted for 32% of the New Zealand population (Statistics, 2017). The regional housing stock rapidly increased from 506,808 units to 535,000 units in 2017. Of further interest with respect to the make-up of the housing market is that 195,364 units (or 38.5%) are not owned by occupants (BRANZ, 2017). Furthermore, the rental stock in 2017 was 216,700, which accounts for 40.5% of the Auckland regional total (Johnson et al., 2018).

The selected case also sets interesting backdrop, as the nuances of the New Zealand economy, which was relatively insulated from much international financial exposure, meant that it fared comparatively well during the GFC and its aftermath (Murphy, 2011). This raises interesting questions for the country; 10 years on from the GFC, and with all the hard-earned knowledge that has brought, does the rise in economic importance of the Auckland housing market mean that New Zealand is now less resilient? Just how are resilience strategies managing this risk and with what objectives?

The primary data collection was conducted during 2017–18. Key institutions were selected and a snowball technique used to develop a comprehensive list (Denzin and Lincoln, 2003). A range of professions and roles were interviewed due to their in-depth understanding on resilience in the economy, the housing market in Auckland, and its role in the New Zealand economy. Professions ranged from policy makers, financiers, investors, authorities (national, regional, municipal), planners, developers, consultants and academics. Roles ranged from Municipal Development Directors, Housing Consultancy CEOs, Municipal Chief Economists, Infrastructure Council Executives, Economic Development Directors, Private Developer Executives, Senior Treasury Officials, Professors, and Senior Central Government Department Officials. To help understand the national and city level context we also reviewed a series of grey literature relating to resilience in the economy, such as consultant reports, research centre reports, and various policy briefs.

The method of investigation was predicated upon a deductive process whereby 20 formal and informal interviews were undertaken. The results of which fed into the analysis and further questioning of other participants in the study (Mason, 2017). The semi-structured lines of questioning were designed to provide an understanding of the resilience of New Zealand to economic shocks emanating from the housing market. It was important at a broad level to bring out respondent thoughts as to what resilience in the economy means, how it is enabled, and the associated role that housing markets and unaffordability have in this respect. This fieldwork was synthesized and triangulated with the desk study aspects. Collation and analysis of data was further enhanced by categorizing key issues and themes that emerged, with relevant quotes highlighted to evidence the narrative. While interviewee names were anonymized in line with ethical conventions, the institutions detailed in Table 1 provide an insight into the breadth of the discussions.

3. The contested interpretation and application of economic resilience

This section is designed to provide the foundation to analyse issues connected to risk stemming from the Auckland housing market, and the ways policy and practice engage with resilience in response. The concept of resilience is often conceived as an aspirational 'good' to help manage the turbulence, shocks and stresses that characterize much of the 21st century society (Amin, 2013; Klein, 2007). It is argued that society now appears to live in a permanent state of economic, environmental and social emergency (Wilson and Swyngedouw, 2014) with risk increasingly normalised (Beck, 2009; Giddens, 1991). Rooted in complex systems thinking, the notion is essentially an organising concept to help govern complexity and uncertainty across multiple public policy concerns (Chandler, 2014; Chandler and Coaffee, 2016;

Table 1
Institutions that contributed to the primary data collection.

Institutions	
Panuku Development Auckland	Law and Economics Association New Zealand
Auckland Tourism Events and Economic Development	Auckland University of Technology
Auckland City Council	The Property Foundation
Pacific Rim Real Estate Society	New Zealand Property Investors Federation
Hamilton Developers Forum	Auckland University
Colliers International	Sense Partners
Royal Institution of Chartered Surveyors (RICS)	Infrastructure New Zealand
Treasury, NZ	Massey University
New Ground Capital	Property Institute of New Zealand
Treasury, NZ	Waikato University

Paidakaki and Moulaert, 2017; Evans and Reid, 2013). It has an inherent anticipatory logic that suggests current action in order to manage intangible future threats (Anderson, 2010).

There is a significant and growing body of literature concerning the field of resilience, but issues connected to its conceptualisation and application are of particular note here. Initially, resilience was designed as a means to cope with, or absorb, shock; to return to normality and promote *stability* of function (Holling, 1973). More recent articulations highlight how resilience can also link to the pathways or adaptation agendas, where rather than try to simply cope with turbulence, systems should *adapt* or even *transition* to a new state that is less exposed and vulnerable to risk (O'Hare et al., 2016). While there are important differences, in reality both stability and change can be desirable characteristics in the context of a wider complex system (Wilkinson, 2012).

These conceptual distinctions are important: a number of authors highlight how the definitional ambiguity of the concept has issues for application (e.g. Brand and Jax, 2007; Davoudi, 2012), in particular with regard to enabling the more politically challenging transformative aspects. For instance, in an analysis that traced the use of resilience from policy to practice in spatial planning, White and O'Hare (2014) demonstrated how resilience tended to be characterised by a simple return to normality that is more analogous with existing ways of knowing and doing, dominant interests, and techno-managerial trends. In a related fashion, in appearing to normalize risk by putting a focus on 'resilience' in response, the concept has been subject to persistent critique, such as by contributing to a governmentality that allocates responsibility for dealing with shocks onto the governed, who may be poorly equipped to do so (Joseph, 2016; Kaika, 2017). These arguments highlight how power and agency may transform a vague politically compelling notion to mirror dominant ontologies or practices (Joseph, 2013; Collier, 2014; Meerow and Newell, 2016). This political economy critique provides an effective means to foreground the links between resilience as a concept and its ability to influence housing markets in practice.

It is clear that post GFC, resilience has been gradually adopted on a political and institutional level as a concept to help manage economic shocks (Cote and Nightingale, 2012; Hermansen and Röhn, 2015). For instance, a search of 'resilience' on the International Monetary Fund website reveals it was found in 7450 documents in June 2018. An emphasis on providing an internal response to manage an uncertain external risk underpins much focus and strengthens the argument that the dominance of capital accumulation practices means that economic risk is now systemic (Harvey, 2011; Brenner et al., 2012; Peck, 2010). Significantly, this risk is difficult to manage, however. Capital can flow instantaneously between nodes of global activity, while technological and financial innovations can rapidly change the way markets and institutions operate (Balland et al., 2015). In this challenging context, domestic governance and regulatory structures do not just struggle to

'keep pace', but have their limits and boundaries exposed. It also helps reveal why resilience is seen as a desirable governance characteristic; advanced nations are rendered vulnerable to risk by fundamental structural aspects, such as the connectedness of capital and societies (Beck, 2009; Castells, 2011).

A further element relating to managing economic resilience is evidence of persistent neoliberal deregulatory pressures, which are visible almost regardless of risks. For instance, when analysing the international response to the GFC it was found that a recurring argument was the need for less, not more, regulation (Brakman et al., 2015; Martin, 2012). The period of austerity that followed in many countries provides a good example, where arguments concerning lower government spending, 'freer' markets, and a lessening of 'red-tape' for business were commonplace. Yet, state intervention did tend to occur in specific areas, particularly those centred on maintaining stability and hegemony of the prevailing financial system, such as by bailing out the banks that were seen as 'too big to fail'. This type of response is usefully described as the tendency for neoliberal politics to 'fail forward' – where failures tend to engender new experimentations around what are essentially very similar market-oriented ideologies (Peck, 2010). Or drawing on resilience theory, resilience as economic stability and recovery appeared to be prioritized over economic adaptation and transformation; neoliberal ideology was itself proving 'resilient' to forces of change. This perspective emphasises the importance of situating institutional practices designed to influence economic resilience, such as by government departments or regulators, within the wider political economy that frames risks.

To add further nuance, we can turn attention to the complex nature of housing markets. It is important to note that markets are not just neutral resource allocation mechanisms, but are actively created and reproduced by actors and institutions (Callon, 1998). With regard to housing there are actually multiple intersecting markets (e.g. financial, land, mortgages) within which a variety of strategies, practices, and risks combine to form housing markets that differ spatially. Research focused on housing also shows how external pressures to change, such as technological 'solutions' or policy 'fixes', can be resisted and fail to disrupt decision making heuristics or processes (Adams et al., 2009, 2012; Lovell and Smith, 2010; Çalışkan, and Callon, 2009, 2010). Policies aimed at reshaping housing markets to increase economic resilience therefore should be considered as part of a complex assemblage that will resist, react, and redistribute.

Given the economic risks associated with housing markets, research is beginning to consider the structures, interconnections and trade-offs inherent in this agenda. While resilience is not a central theme, Murphy (2011) and Lowe (2017) both consider the macroeconomic, institutional, and policy conditions that help shelter Australian and New Zealand housing markets from the GFC. They similarly argue that while these markets were able to avoid significant impacts, rising capital growth and household debt present ongoing risks. In other research that examines economic risks in the sector, Fraser et al (2008) explored the New Zealand house price bubble between 1970 and 2005. They highlight the high dominance of the residential asset class over an extended period prior to the GFC in a way that predicates the current resilience challenges. Van der Heijden et al. (2011) also discuss the variable nature of housing markets. They argue that in a Western European context, countries whose markets were more exposed to private capital were more vulnerable to the GFC (English, Irish, the Netherlands), than those who were not (Germany and Belgium). This provides an interesting insight into possible strategies to become more resilient to economic shocks of this nature. The role of the housing market as part of the wider economy should therefore be a key part of the resilience discussion.

At this scale, however, we see spatial and temporal trade-offs quickly emerge. For example, while agglomerations of industry can provide a spur to economic growth, over the longer-term the lack of diversity can make regions vulnerable to employment shock (Brown

and Greenbaum, 2017). Similarly, while a dominant housing market, or climbing the ‘housing ladder’ can increase exposure to risk (Pareja-Eastaway and Sánchez-Martínez, 2017), it can also boost personal wealth and wider economic growth through enabling private consumption and residential construction (Catté et al., 2005). In a related fashion, high exports may mean your economy is adaptive (Pickles and Smith, 2011), but you are consequently more exposed to the vagaries of the global economy. Other research highlights how the balance of regional economies and the nature of urbanisation plays a role in resilience. A large EU study into the effects of the GFC by Brakman et al. (2015) showed that regions with a large proportion of commuters, or who had a significant share of high tech industries, fared comparatively better than others. Providing a slightly different spin, the least resilient regions in Spain to the effects of the GFC were those with a high proportion of construction and manufacturing, while the most resilient were those economies that had specialised in energy, business, and professional services (Cuadrado-Roura and Maroto, 2016). A further example of the differences between regions is provided by Antoniucci and Marella (2016) who demonstrate that while increasing housing supply via intensification practices in urban areas provides economic benefits to a city, housing markets in less dense cities proved to be more resilient than denser cities during a recession.

This direction of discussion emphasises that institutionally-driven economic resilience objectives may be in competition between sectors, scales, or times (Bristow, 2010). As such, there are political selectivities that shape what the risk is, to whom, and how resilience policies may shape markets in response. For instance, do you promote policies that focus on increasing the wealth nations and individuals have to cope with shocks, even while systemic risk is increased? Or should you raise interest rates to cool an overheating housing market, which while effective in one city, will reduce disposable income and economic growth on a national scale?

A further element of interest for our discussion of resilience concerns operational choices and the possibilities of quantifying risks. For example, Greenhalgh and King (2013) suggest housing market shaping ideas in terms of measuring markets, using property market filtering and chaining techniques, and developing indicators of property market resilience using VAT registration and Rateable Value datasets. Similarly, Röhn et al. (2015) develop a set of resilience and vulnerability indicators that include asset market imbalances. Dinh and Pearson (2015) explore housing operations more from a community economic resilience framework of measurement, within which ‘softer’ factors affecting housing market resilience are recognised. Metrics in resilience continue as a theme for Dubé and PolêSe (2016) when they consider core factors influencing the demand side of housing via population, employment, unemployment and employment rates. While, there is a managerial pragmatism at play, the operational and stability oriented definition of ‘resilience’ remains problematic, siloed and reactive due to the difficulty in excluding the many ‘players’ that may not appear in the measures (e.g. Gibb et al., 2016). It also puts the focus squarely on internal institutional responses as a means to cope with dynamic systemic risks.

This section has served to link resilience as a theory, with its complex interpretation and application in the context of an economy and housing markets. As a means to organise complex systems and cope with shock and stress, resilience thinking clearly has applicability to the economy and housing markets, such as a means to provide a new lens or policy narrative (Scott and Gkartzios, 2014), or the way it highlights the need to foster positive characteristics in the face of inevitable major or minor disruptions (Martin, 2012). While there is potential to influence the risk from housing markets, we can appreciate that policy and regulatory tensions and economic trade-offs may occur between national, regional, and individual resilience, short-term and long term resilience, or even between housing markets and other aspects of the economy. Given this context, we can see that economic risks and the need for resilience are dynamic: the risk is sometimes macro-economic;

sometimes regional and specific; sometimes relating to housing or industry. That said, it is important to note that there is significant connectivity with regional and institutional issues also influence housing markets. For example, investment in cities or regions can drive housing demand, while fiscal contraction can stimulate labour to move elsewhere. Consequently, much of the material serves to underscore the hidden political nature of economic resilience, where policy or regulation can have a zero sum nature that may alternatively strengthen or weaken dependent upon the desired objective, scale, or time frame.

We will now turn our attention to the empirical aspects of the study to examine more deeply the links between resilience, the Auckland housing market as representing a national risk, and the implications of current policy and practice.

4. Unpacking the perception of economic risk

Findings focus on two core themes that, first, unpack how dominant housing markets and their policies affect the resilience of an economy, and second uncover who is attempting to shape resilience to housing market shocks. Overall, there was broad agreement on the need to pursue policies that make the Auckland housing market more resilient for the benefit of the New Zealand economy. For instance, the ex-New Zealand Prime Minister, Bill English (2015), underscored the fundamental links between resilience, the economy and the Auckland housing market stating:

“The Government takes the approach that the best thing we can do for the economy is work to improve its resilience—its capacity to adapt... The most evident indication of a problem is Auckland house prices... Because it's a large asset on the New Zealand balance sheet, worth around \$600 billion. And because what happens in our housing markets has a profound effect on every household”.

When interrogating the question of what is the key economic risk to be resilient to, the dependence of the national economy on the housing market was repeatedly put forward. One interviewee exemplifies this point in that:

“Clearly the economy is very dependent on it [Housing Market]. If there is some kind of shock to the housing market, it will inevitably have an impact on the Auckland economy and it will have an impact on the national economy” (Senior Consultant B).

There was also broad agreement on the risks that the Auckland housing market is exposed to at a national and global scale. During the last GFC the New Zealand economy was protected by dominant Australian banks, who were not as intertwined with international financial markets as the European banks (e.g. Murphy, 2011). This insight into the international economic links provided some of the underlying rationale of the need for resilience. In this respect New Zealand economic risk was seen to be dependent upon matters largely outside their control, namely the Australian institutional and regulatory perceptions of economic risk and resilience, their associated good practice, and the nuances of their economic cycle. One interviewee explains New Zealand's exposure in the housing market, stating:

“...therein lies to me a concern because really, it's outside the control of New Zealand. To me it's much more at the discretion of the Australian regulatory environment. Whatever changes or whatever they do they can have an impact as to what's going to happen. To me that's the biggest risk I think the whole thing faces” (Economic Development Executive).

However, there was general, although not unanimous, agreement that New Zealand was more resilient than the last GFC. On the plus side, there has been a significant increase in institutional information concerning financial risks and regulatory awareness of risky practices, but this occurs within the individualised context of highly leveraged people benefitting from historically low interest rates. Here we see two key

quotes that underscore the importance of discussing resilience for whom and how. We have a perception of a more resilient economy due to tighter regulatory control, set against a potentially less resilient housing market due to the high debt of many market participants:

“Certainly from a regulatory perspective, you must conclude that we are more resilient than we were. The Reserve Bank, in my view, dropped the ball on those finance companies. They didn’t monitor them at all, basically, during the GFC... The Aussie banks are far stricter now about their lending. You see how they’ve proactively met and exceeded regulatory requirements in the last few years... last year, for example, they just all unilaterally, without any push from the Reserve Bank or anyone, stopped lending to offshore investors” (Municipal Chief Economist).

“Auckland households are extremely highly geared and in many cases are right at the limit of what they can service, even at these historically low interest rate levels. So any kind of international shock that sends interest rates up here—and we’re obviously dependent on the international market to set our rate—will have pretty serious impacts for our poor old housing market” (Senior Consultant A).

5. The shaping of resilient responses

Turning to how and with what implications, definitional and conceptual issues were identified as an issue by some actors and agencies involved with considering the resilience of housing markets. This framing of risk is an important issue for designing policies to increase economic resilience or shape housing markets, and helps illustrate ongoing political considerations regarding resilience from what, how, and for whom? This was further complicated by the subjective nature of economics where, for example, bank economists were divided on even such fundamental issues such as whether the economy is slowing or accelerating. This underlying uncertainty and hidden selectivity is highlighted by these quotes:

“How do you measure its ability to bounce back? Is it things like property prices remain constant, don’t fall away as sharply? Is it the unemployment rate doesn’t rise as rapidly as other countries? Or the stock market falls by a smaller amount. These are all different ways you could measure GDP growth... If a house is just a commodity then measuring house price rebounds is not the right measure... [is it the] resilience of certain public institutional level government or central government rather than the individuals within it or their employment?” (Municipal Chief Economist).

“New Zealand’s regulatory approach is very market oriented. There is very strong focus throughout the entire framework on consumer and investor responsibility... What that means specifically is there is no specific objective here, for instance, to say that the Reserve Bank or financial regulators should prevent financial loss, or banks from failing... There is no objective to manage institutional soundness, and no consumer protection aspects” (Senior Treasury Official(s)).

These examples underscore how there are no agreed economic resilience objectives in New Zealand. In the absence of this central direction we can see that a conventional financial framing and siloed logic was typically pursued, such as by promoting market and individual responsibility or by institutionally based stress tests to provide evidence of their ability to cope (e.g. Thomas, 2013). However, the IMF recently cautioned that these policies, which ostensibly are designed to increase resilience, have had limited effects and; “do not seem to have prevented a continuous deterioration of borrower households’ vulnerability against debt servicing capacity risks, such as higher interest rates or income shocks” (IMF – International Monetary Fund, 2017). Further, as with all decision support tools or bounded tests of this nature, key questions remain with regard to what is included or not, with difficulty to quantify effects, such as those relating to

the wider economy, potentially not included (Boldyrev and Svetlova, 2016). The tendency to measure risks in this way inevitably lends itself to siloed stability resilience approaches.

A similarly orthodox financial framing and interpretation was visible elsewhere. For example, one resilience strategy mooted was to ‘diversify the portfolio’ by increasing overall overseas investment. Or the approach suggested that we need new financial products to increase the ability to get on the property ladder. Reflecting on the discussion so far, these may seem unusual tactics that are in conflict with the experience of the GFC, as increasing exposure to international markets could make New Zealand less resilient, not more, while more debt may increase risk exposure. In these interpretations we see risk and resilience being simultaneously exposed, hedged and redistributed via the housing market. For example:

“if you change the game and you go truly international with your financing strategy and you do it at a scale that is attractive to global markets, then you’ve got a much bigger pool and therefore a much greater resilience of your financing options” (Infrastructure Council Executive).

Turning to the cascading effects of these policies on practice, the institutional tensions between scale, sectors, and stakeholders becomes increasingly apparent. Here, the lessons from the GFC and the subsequent recovery illuminate how some groups are more privileged in economic resilience policy than others. For example, those who were employed in a professional sector and those who already owned mortgages benefitted financially from the fall in interest rates that the GFC recovery brought. Conversely, the drop in overseas buying power meant that manufacturing, retail, and lower wage industries experienced a slowdown. A further quote illustrates the selectivity and politics in determining the beneficiaries of existing resilience policies that are designed to maintain the status quo in the economy and protect those who have invested in the housing market:

“So, here’s the GFC and you suddenly see a massive improvement in housing affordability. That’s because the median income didn’t drop very far [but] interest rates plummeted... So the ability to repay your mortgage actually dramatically improved... the primary impact here was exports [and] the industries that lost out were things like manufacturing, retail... These were people that probably weren’t homeowners anyway, or less likely to be on that median wage and therefore buying a home.... Anyone in professional services was doing really quite well” (Municipal Chief Economist).

The issue of debt in the housing market is also useful in illustrating the effects of resilience strategies, as risk has been transferred between stakeholders in line with government fiscal policy while remaining on a similar scale. Although there is a clear objective to promote selected institutional stability via low central government debt (Rutherford, 2018) or Local Authority debt caps, this still leaves other sectors and groups exposed to housing market shock and is also to the detriment of future development reward and therefore may weaken long-term resilience. To underscore this trade-off interviewees identify how the type of debt has shifted from public to private, but exposure to a wider financial shock remains.

“We have a high debt in the private side, but funnily enough if you look back over history, the debts have just spun from public to private. The overall debt levels per head of population from possibly the mid ‘80s hasn’t changed too much” (Economic Development Executive).

“I guess that structures that promote fiscal stability amongst councils, like not limiting how much debt they can take on, or any of the fiscal limits, would help to promote resilience, even though they definitely are left quite high and dry in the event of a massive housing price shock” (Senior Treasury Official).

We can now see that economic risk is largely framed as relating to

foreign banking practices, the economic dependence on housing, and domestic ownership of debt. We have also found that ‘who’ is determining resilience in relation to the economy is mostly orchestrated on an institutional basis using a stability logic by those that shape the fiscal rules and housing market (e.g. governments), rather than those that internally operate within it (e.g. residents and developers). This means that while there may be broad agreement of the need to be resilient, dominant agents and institutions in the housing market may weaken, strengthen or redistribute resilience in the economy dependent upon their own overarching objectives.

6. Economic resilience as stability from systemic risk

By analysing the framing and application of resilience as an organising concept to influence both housing markets and the wider economy, we can clearly see its attraction and its limits. The housing market can be hugely important to domestic economic success and benefits from easy rapid transfer of capital across national boundaries. It is a market that is tailor-made for a resilience approach, being complex, uncertain, and operating outside the scope and reach of much traditional control mechanisms (Bristow and Healy, 2015). The way that this has become manifest in practice adds to our understanding of the concept and helps reveal the inherent political tensions and selectivities. The data argues that while resilience is clearly accepted as an objective, not only is there no consensus over what that should entail, but there is little discussion concerning how you would you know whether it was achieved. It is, as has been previously claimed in the literature, taken as a self-evident goal (Jacobs and Malpas, 2017). This ambiguity may also affect the dimension of resilience that is pursued by key agencies. Despite the claim from then Prime Minister Bill English (2015) that the best thing to do for the economy is: “to improve its resilience—its capacity to adapt”, in practice there is little evidence of adaptation, with instead a strong focus on enabling institutional stability to cope with economic shock. As has been claimed elsewhere (e.g. White and O’Hare, 2014), without strong direction there is a tendency for resilience strategies to be stability oriented to underpin the existing structures and agency of decision-making.

In the literature we referred to the shaping power of neoliberalism, in particular the way that governments may promote resilience to avoid changing systemic risks and shift responsibility to cope onto people and communities (Brenner et al., 2012). The data here, however, reveals that this responsabilisation is *cascading*. For example, on a national scale, we can see how debt levels may be consistent historically, but that this has been reduced at the centre, and typically expanded in the local government sector and on individuals who are responsible for their own lending practices. The risk is transferred, and so the need to be resilient is also, but given the power and agency imbalances the only real response is self-organisation to increase the ability to cope. Moving upwards in scale, we can see that given the size of New Zealand the nation has essentially been ‘responsibilised’ by Australian banking and regulatory practices, who operate according to their own needs. In turn, given their own problems with regard to managing flows of global risk they may be responsabilised by global actors, international markets, or flows of capital from Asia or elsewhere (Murphy, 2011). Or in short, the dominant Western neoliberal financial model.

This leads to a further strand of critical discussion regarding the ways that these dominant framings create certain post-political operational modalities, which overwhelmingly focus on the structures and functionality of an institutional economic system, with limited space for politics and contestation concerning the impact of this neoliberal growth agenda (Cote and Nightingale, 2012). More generally, we can see how resilience practice supports speculation, whether by individuals within their own city, or by financial institutions from across the globe. By positioning the world as complex and uncertain, and resilience as a means to cope with, and adapt to, these unpredictable stressors, it has a governmentality purpose that masks the political

choices inherent in the ways that capital accumulation or neoliberalism may help generate shocks (Brenner et al., 2012).

In these circumstances we can better appreciate how and why the methods and strategies employed have been influenced by long-standing institutional and regulatory logics. For example, there is a desire to work with the market, to help foster good risk behaviours, or to slightly alter fiscal aspects, such as reducing national debt or increasing cash reserves in the sector. Considering the last decade of policies, a siloed approach has been evident, where risk is maintained, but redistributed. That said, from a regulatory or institutional perspective you can appreciate why interviewees had a strong view that resilience had increased. From a stability and regulatory perspective, it had. But questions of implications and resilience ‘for whom’ now come to the fore.

Reflecting on economic resilience policies following the last GFC, we can see that there is significant unfairness. In New Zealand an economic risk emerging from the housing market tended to affect those who were on a lower wage who didn’t even own their own homes (Johnson et al., 2018). The post-GFC employment statistics are also illuminating: unemployment rose among young people, Pasifika and Maori ethnic groups. In contrast, the employment rate of 60–64 year olds rose from 42% in 2000 to 74% in 2017 (Maré, 2018). Of course, people who were both young and in lower wage jobs may have suffered intersecting disadvantages. More generally, the political focus on enabling the financialization of housing, such as by taxation and legislation incentives, has created an affordability problem for those who do not own property (Dorling, 2014; Aalbers, 2016). So strategies that have been designed to enable economic resilience to the risk from the Auckland housing market have tended to promote financial resilience for property investors and owners over more disadvantaged members of society.

This raises important questions for fairness and equity, not just with regards to housing markets, but with regard to where economic risks are transferred to. Resilience discourses have essentially been framed in a manner which conforms to the requirements of existing hegemonic power relations, leaving those elements which may threaten these norms positioned outside of its framings (Peck, 2010). By not accounting for power and agency, managing for resilience runs the risk of reproducing inequality and domination, with stability and persistence much more common than transformation. This is related to ideology and the ways in which different groups frame and reinterpret the resilience concept in ways that are linked to their own interests (Smith and Stirling, 2010). For example, extending the financial ladder to provide more access to credit is seen as a way to provide economic resilience, as it was perceived that people would be more resilient if they have a mortgage. Or by extending the financial ladder by providing more capital options for occupiers, so that they can staircase from rental to ownership. There is a degree of institutional self-interest visible, and an ability of political interest groups to co-opt a further financial liberalization and tax reform agenda (Wilson and Swyngedouw, 2014), one that conform to existing arrangements rather than promote alternative systems and outcomes. Again, it is a type of ‘failing forward’ where contradictions are visible as we try to become more resilient to a financial crisis by increasing access to global finance and the housing market (Peck, 2010).

While there are benefits to some from this policy articulation of resilience as ‘engineered’ stability, in the next section we discuss the possibility of a complementary transformational approach by focusing on the balance of the economy and the overall exposure to systemic risk presented by housing markets.

7. Economic resilience as transformation away from systemic risk

While the main focus of this article is to provide a critique and analysis of current practice rather than design alternative policies, nevertheless some discussion of this nature is necessary. It is evident

that while economic risks stemming from housing markets are substantial, resilience policies are partial and selective. There will always be a need for stability and a degree of trade-offs, and by drawing upon resilience theory we can bring these limits to light and help open up new discourses about the need and potential for more transformative policies. In simple terms this requires an expansion in focus from institutions and regulation to also consider the balance of an economy and the wider forces that create and reproduce housing markets.

If resilience focused on adaptation or transformation is an aim, then national policies that reduce exposure to systemic risks would be needed. Taking a political-economy perspective we can see that the focus on stability in economic resilience policy doesn't recognise the crisis prone nature of capitalism; risks will always be taken, businesses will always fail, debt will be ever present. Indeed, this is a fundamental basis of how markets operate. It is in the very nature of capitalism for this to occur. Moreover, given the strong connection of the Auckland housing market to flows of global capital, debt, and speculative activity the market is inevitably exposed. Resilience in the context of fostering a 'safe' or 'stable' system is therefore an impossibility over the long-term. In simple terms we need to move from 'fail-safe' to 'safe-to-fail', where risks are reduced, manageable and equitably redirected towards risk-takers.

Transformational practices of this nature require significant direction and coordination however, in part as they may require changes to existing power structures and institutions, and involve an array of fiscal or policy levers across various public policy arenas. The initial stage would be to reflect on the extent to which the overall exposure of the Auckland housing market to systemic risk taking and the unpredictable flows of global finance is desirable. The lesson from the last GFC is that countries whose markets were more exposed to private capital were more vulnerable to economic shock (Van der Heijden et al., 2011), but there is no doubt that some risk can ring economic growth. This would also involve reflecting on the balance of an economy and more fine grained work researching context and place specific risks that will differ from region to region. Essentially this is a shift from a one-size-fits-all institutional monetary focus to recognise the complex way markets operate and can be reconfigured. For example, this may include a resilient framework that is agile enough to incorporate housing market price fluctuations both positive and negative; sophisticated in multi-scalar approaches to consider housing markets that are sensitive to the heterogeneous and global characteristic of housing; and ideologically detached enough to conceive a multi-sector that can accommodate public and private (and 3rd sector) collaborations to address inelastic land supply and the ability to transport (human, natural and capital) resources between spaces – and as example, opening the way for more balanced land value capture that a dominant housing market could redistribute and rebalance. The shaping of housing markets by institutional good practice and learning could also make resilience in the wider economy more akin to institutional complexities and evolutionary progression rather than attempting to maintain an equilibrium. Stability is part of a resilience strategy, but it only reflects a narrow range of options available to reduce exposure for nations.

By researching questions connected to resilience from what, for whom and how, we can appreciate the hidden politics at play, both within nation states, and at a global scale. The promise and rhetorical power of the concept translate into practice in an uneven and unfair manner, with systemic risk largely untouched and persistence of capital gaining actors and practices privileged. The tools and approaches currently adopted can only affect the housing market in a limited fashion and by opening up these limitations we hope to stimulate wider debate on the practical utility of resilience and how we may cope, adapt and transform in response to economic shock.

8. Conclusion

Housing markets are at the forefront of global capital seeking

activities, they are hugely important for national economies, and, given the international interconnectedness and potential for shock, they have been closely associated with the resilience discourse. The research supports other critiques that identify the difficulties in operationalising 'fuzzy concepts' such as resilience. Findings show that 'how' and 'for whom' resilience in the economy is formed in relation to housing markets is a matter of power and agency. In the absence of strong direction, resilience framing was found to be shaped by existing institutional and professional logics. While the risk to the economy associated with housing markets has a pervasive effect, in practice resilience policy served to underpin the dominant political economy, the stability of selected institutions, and to a certain extent, existing homeowners and speculative investors. There is no real evidence of seeking to transition away from this systemic risk and instead policies essentially redistribute risk, and by extension resilience, between stakeholders, scales and times in an uneven and hidden manner.

With regard to the housing market, this brings into focus issues connected to resilience for whom. There is a zero-sum nature to much policy with resilience both strengthened and weakened depending upon how the issue is framed and who or what is deemed in need of protection. While institutions are now able to cope with shock and stress better, highly leveraged individuals may not be. The reality is that by designing policies that enable the housing market to continue to perform as a highly productive asset class for global finance and others with access to capital, it privileges owners over non-owners, and housing speculators over those in retail or manufacturing sectors who may suffer from the knock-on effects of another GFC. As such, it appears the resilience of the housing market is merely a reproduction of political dominance dependent on economic circumstances. Critically, the broad housing market that underpins crises in the economy escapes much attention, risk is cascaded over scale in a largely opaque manner, and the emphasis is put on the ability to self-organise and cope with shock better, such as by raising capital reserves or by macro-prudential measures.

We therefore put forward concern on the extent to which the concept of resilience is useful applied in this way, beyond reactively providing a regulatory tweak or a cash buffer. The rhetoric has an active, reassuring quality that promotes economic confidence in the face of uncertain shock, and its value may be more political than practical. This puts a framing of resilience in practice as one that serves existing risk taking ideologies, with stakeholders with power and agency accepting the potential for long-term economic shock as an acceptable corollary of the shorter-term capital generating potential of housing as an asset class. We see the effects of this beyond a continuation of the current system however, as the focus of policy is largely on protecting those who take the risks, rather than those who don't. Put differently, reflecting on the way resilience has been mobilised as an organising concept, economic risk stemming from agents and institutions shaping the housing system have themselves proved resilient to change.

More encouraging for this study, in revealing these difficulties we see some opportunities for clarity amidst the fog of practical operations and political expediency when considering economic resilience in the context of a dominant housing market. A move towards an alternative multi-dimensional framework that adds transformation to stability is recommended. This approach would recognise the complexity of markets and the differences between regions and the need to rebalance economic exposure in a more fine-grained fashion. It would also need clear national objectives that coordinate between sectors and scales, aspects which are currently not part of the resilient discourse, but we hope will be.

Acknowledgements

The authors would wish to thank funding from The Property Foundation and The New Zealand National Science Challenges.

References

- Aalbers, M.B., 2009. The globalization and Europeanization of mortgage markets. *Int. J. Urban Reg. Res.* 33 (2), 389–410.
- Aalbers, M.B., 2016. *The Financialisation of Housing: a Political Economy Approach*. Routledge, London.
- Adams, D., Leishman, C., Moore, C., 2009. Why not build faster?: Explaining the speed at which British house-builders develop new homes for owner-occupation. *Town Plan. Rev.* 80 (3), 291–314.
- Adams, D., Leishman, C., Watkins, C., 2012. Housebuilder networks and residential land markets. *Urban Stud.* 49 (4), 705–720. <https://doi.org/10.1177/0042098011405687>.
- Amin, A., 2013. Surviving the turbulent future. *Environ. Plan. D* 31 (1), 140–156.
- Anderson, B., 2010. Preemption, precaution, preparedness: anticipatory action and future geographies. *Prog. Hum. Geogr.* 34 (6), 777–798.
- Antoniucci, V., Marella, G., 2016. Small town resilience: housing market crisis and urban density in Italy. *Land Use Policy* 59, 580–588.
- Austin, P.M., Gurran, N., Whitehead, C.M., 2014. Planning and affordable housing in Australia, New Zealand and England: common culture; different mechanisms. *J. Hous. Built Environ.* 29 (3), 455–472.
- Balland, P., Rigby, D., Boschma, R., 2015. The technological resilience of US cities. *Camb. J. Reg. Econ. Soc.* 8 (2), 167–184.
- Beck, U., 2009. *World at Risk*. Polity Press, Cambridge.
- Boldyrev, I., Svetlova, E. (Eds.), 2016. *Enacting Dismal Science: New Perspectives on the Performativity of Economics*. Springer.
- Brakman, S., Garretsen, H., van Marrewijk, C., 2015. Regional resilience across Europe: on urbanisation and the initial impact of the Great Recession. *Camb. J. Reg. Econ. Soc.* 8 (2), 225–240.
- Brand, F., Jax, K., 2007. Focusing the meaning (s) of resilience: resilience as a descriptive concept and a boundary object. *Ecol. Soc.* 12 (1), 23.
- BRANZ, 2017. *The New Zealand Rental Sector Report ER22*. BRANZ, Wellington.
- Brenner, N., Marcuse, P., Mayer, M. (Eds.), 2012. *Cities for People, Not for Profit: Critical Urban Theory and the Right to the City*. Routledge.
- Bristow, G., 2010. 'Resilient regions: Re-'place'ing regional competitiveness'. *Camb. J. Reg. Econ. Soc.* 3 (1), 153–167.
- Bristow, G., Healy, A., 2015. Crisis response, choice and resilience: insights from complexity thinking. *Camb. J. Reg. Econ. Soc.* 8 (2), 241–256.
- Brown, L., Greenbaum, R.T., 2017. The role of industrial diversity in economic resilience: an empirical examination across 35 years. *Urban Stud.* 54 (6), 1347–1366.
- Çalışkan, K., Callon, M., 2009. Economization, part 1: shifting attention from the economy towards processes of economization. *Econ. Soc.* 38 (3), 369–398.
- Çalışkan, K., Callon, M., 2010. Economization, part 2: a research programme for the study of markets. *Econ. Soc.* 39 (1), 1–32.
- Callon, M. (Ed.), 1998. *The Laws of Markets*. Blackwell/Sociological Review, Oxford.
- Castells, M., 2011. *The Rise of the Network Society* 12 John Wiley & Sons.
- Catte, P., Girouard, N., Price, R., André, C., 2005. The contribution of housing markets to cyclical resilience. *Oecd Econ. Stud.* 1, 125–156.
- Chandler, D., 2014. Beyond neoliberalism: resilience, the new art of governing complexity. *Resilience*. Taylor & Francis, pp. 47–63.
- Chandler, D., Coaffee, J. (Eds.), 2016. *An International Resilience Handbook*. Routledge, London.
- Collier, S.J., 2014. Neoliberalism and natural disaster: insurance as political technology of catastrophe. *J. Cult. Econ.* 7 (3), 273–290.
- Cote, M., Nightingale, A.J., 2012. Resilience thinking meets social theory: situating social change in socio-ecological systems (SES) research. *Prog. Hum. Geogr.* 36 (4), 475–489.
- Cuadrado-Roura, J., Maroto, A., 2016. Unbalanced regional resilience to the economic crisis in Spain: a tale of specialisation and productivity. *Camb. J. Reg. Econ. Soc.* 9 (1), 153–178.
- Davoudi, S., 2012. Resilience, a bridging concept or a dead end? *Plan. Theory Pract.* 13 (2), 299–307.
- Demographia, 2018. *14th Annual Demographia International Demographia International Housing Affordability Survey: 2018 Rating Middle-Income Housing Affordability*. [Accessed 5th May 2018]. <http://www.demographia.com/dhi.pdf>.
- The landscape of qualitative research. In: Denzin, N., Lincoln, Y. (Eds.), *Theories and Issues*. Sage Publications, London.
- Dinh, H., Pearson, L., 2015. Specifying community economic resilience - a framework for measurement. *Australasian J. Reg. Stud.* 21 (3), 278–302.
- Dorling, D., 2014. *All that is solid*. Allen Lane, London.
- Dubé, J., Polèse, M., 2016. Resilience revisited: assessing the impact of the 2007–09 recession on 83 Canadian regions with accompanying thoughts on an elusive concept. *Reg. Stud.* 50 (4), 615–628.
- Eaqub, S., Eaqub, S., 2015. *Generation Rent: Rethinking New Zealand's Priorities*. BWB Texts, Wellington.
- English, B., 2015. *Speech on Housing Affordability in New Zealand*. [Accessed 26th June 2018]. <https://www.beehive.govt.nz/speech/speech-housing-affordability>.
- Eraydin, A., 2016. The role of regional policies along with the external and endogenous factors in the resilience of regions. *Camb. J. Reg. Econ. Soc.* 9 (1), 217–234.
- Evans, B., Reid, J., 2013. Dangerously exposed: the life and death of the resilient subject. *Resilience* 1 (2), 83–98.
- Fraser, P., Hoesli, M., McAlevey, L., 2008. House prices and bubbles in New Zealand. *J. Real Estate Financ. Econ.* 37 (1), 71–91.
- Gibb, K., McNulty, D., McLaughlin, T., 2016. Risk and resilience in the Scottish social housing sector: 'we're all risk managers'. *Int. J. Hous. Policy* 16 (4), 435–457.
- Giddens, A., 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Polity. Giddens, Cambridge.
- Greenhalgh, P., King, H., 2013. Developing an indicator of property market resilience—investigating the potential of GIS to analyse business occupier displacement and property market filtering: a case study of Tyne and wear. *Urban Stud.* 50 (2), 372–390.
- Harvey, D., 2011. *The Enigma of Capital: and the Crises of Capitalism*. Profile Books.
- Hermansen, M., Röhn, O., 2015. *Economic Resilience: the Usefulness of Early Warning Indicators in OECD Countries*, OECD Economics Department Working Papers, No. 1250. OECD Publishing, Paris.
- Holling, C.S., 1973. Resilience and stability of ecological systems. *Annu. Rev. Ecol. Syst.* 4, 1–23.
- Hudson, R., 2010. Resilient regions in an uncertain world: wishful thinking or practical reality. *Camb. J. Reg. Econ. Soc.* 3 (1), 11–25.
- IMF – International Monetary Fund, 2016. *Global House prices: Time to worry again?* IMF Blog. [Accessed 26th June 2018]. <https://blogs.imf.org/2016/12/08/global-house-prices-time-to-worry-again/>.
- IMF – International Monetary Fund, 2017. *Global Housing Watch*. Available at: [accessed 27 April 2018]. <http://www.imf.org/external/research/housing/report/pdf/Q2.2017.pdf>.
- Jacobs, K., Malpas, J., 2017. *The language of resilience: ideas and action in contemporary policy-making*. Housing. Theory Soc. 1–16.
- Johnson, A., Howden-Chapman, P., Eaqub, S., 2018. *A Stocktake of New Zealand's Housing*. Crown Copyright. [Accessed 26th June 2018]. <https://www.beehive.govt.nz/sites/default/files/2018-02/A%20Stocktake%20OP%20New%20Zealand%27s%20Housing.pdf>.
- Joseph, J., 2013. Resilience as embedded neoliberalism: a governmentality approach. *Resilience* 1 (1), 38–52.
- Joseph, J., 2016. Governing through failure and denial: the new resilience agenda. *Millennium* 44 (3), 370–390.
- Kaika, M., 2017. Don't call me resilient again!: the New Urban Agenda as immunology... or... what happens when communities refuse to be vaccinated with 'smart cities' and indicators. *Environ. Urban.* 29 (1), 89–102.
- Klein, N., 2007. *The shock doctrine. The Rise of Disaster Capitalism*. Macmillan.
- Kuang, W., Li, X., 2012. Does China face a housing affordability issue? Evidence from 35 cities in China. *Int. J. Hous. Mark. Anal.* 5 (3), 272–288.
- Lovell, H., Smith, S.J., 2010. Agencement in housing markets: the case of the UK construction industry. *Geoforum* 41 (3), 457–468. <https://doi.org/10.1016/j.geoforum.2009.11.015>.
- Lowe, P., 2017. Household debt, housing prices and resilience. *Econ. Anal. Policy* 55, 124–131.
- Maré, D.C., 2018. The labor market in New Zealand, 2000–2017. *Iza World Labor* 427.
- Martin, R., 2012. Regional economic resilience, hysteresis and recessionary shocks. *J. Econ. Geogr.* 12, 1–32.
- Mason, J., 2017. *Qualitative Researching*. Sage.
- Meerow, S., Newell, J.P., 2016. Urban resilience for whom, what, when, where, and why? *Urban Geogr.* 1–21.
- Murphy, L., 2011. The global financial crisis and the Australian and New Zealand housing markets. *Hous. Built Environ.* 26, 335.
- Murphy, L., 2016. The politics of land supply and affordable housing: Auckland's Housing Accord and Special Housing Areas. *Urban Stud.* 53 (12), 2530–2547.
- O'Hare, P., White, I., Connelly, A., 2016. Insurance as maladaptation: resilience and the "business as usual" paradox. *Environ. Plann. C Gov. Policy* 34 (6), 1175–1193.
- Paidakaki, A., Moulaert, F., 2017. Disaster resilience into which direction (s)? Competing discursive and material practices in Post-Katrina New Orleans. *Hous. Theory Soc.* 1–23.
- Pareja-Eastaway, M., Sánchez-Martínez, M.T., 2017. Have the edges of homeownership in Spain proved to be resilient after the Global Financial Crisis? *Int. J. Hous. Policy* 17 (2), 276–295.
- Peck, J., 2010. *Constructions of Neoliberal Reason*. Oxford University Press, Oxford.
- Pickles, J., Smith, A., 2011. Delocalization and persistence in the European clothing industry: the reconfiguration of trade and production networks. *Reg. Stud.* 45, 167–185.
- Piketty, T., 2015. About capital in the twenty-first century. *Am. Econ. Rev.* 105 (5), 48–53.
- REAU - Real Estate Analysis Unit, 2018. *Home Affordability Report*. available at. Massey University, New Zealand [Accessed 4th May 2018]. <http://www.massey.ac.nz/massey/learning/colleges/collegebusiness/school-of-economics-and-finance/research/mureau/mureau-home.cfm>.
- Röhn, O., et al., 2015. *Economic Resilience: a New Set of Vulnerability Indicators for OECD Countries*, OECD Economics Department Working Papers, No. 1249. OECD Publishing, Paris.
- Rutherford, H., 2018. *Low Public Debt Will Steer Through Global Turmoil – Finance Minister*. Stuff Media. [Accessed 26th June 2018]. <https://www.stuff.co.nz/business/101218256/low-public-debt-will-help-nz-steer-through-global-turmoil-finance-minister>.
- Scott, M., Gkartzios, M., 2014. Rural housing: questions of resilience. *Hous. Soc.* 41 (2), 247–276.
- Smith, A., Stirling, A., 2010. The politics of social-ecological resilience and sustainable socio-technical transitions. *Ecol. Soc.* 15 (1), 11.
- Statistics, N.Z., 2017. *Subnational Population Estimates: At 30 June 2017*. [Accessed 26th June 2018]. <https://www.stats.govt.nz/topics/population/>.
- Thomas, R., 2013. Resilience and housing choices among Filipino immigrants in Toronto. *Int. J. Hous. Policy* 13 (4), 408–432.
- Van der Heijden, H., Dol, K., Oxley, M., 2011. Western European housing systems and the impact of the international financial crisis. *J. Hous. Built Environ.* 26 (3), 295–313.
- White, I., O'Hare, P., 2014. From rhetoric to reality: which resilience, why resilience, and whose resilience in spatial planning? *Environ. Plann. C Gov. Policy* 32 (5), 934–950.
- Wilkinson, C., 2012. Social-ecological resilience: insights and issues for planning theory. *Plan. Theory* 11 (2), 148–169.
- Wilson, J., Swyngedouw, E., 2014. Seeds of Dystopia: Post-Politics and the Return of the Political 'In 'The Post-Political and Its Discontents: Spaces of Depoliticization, Spectres of Radical Politics'. Edinburgh University Press.